

## **Department of the Interior - Southwest Climate Science Center: Talking Points (July 19, 2011, Dave Busch)**

### **General**

- On October 10, 2010, the Secretary of the Interior announced the locations selected for the Department of the Interior's Southwest Regional Climate Science Center (SWCSC).
- The SWCSC will be part of a network of 8 CSCs that will be geographically distributed throughout the United States. Five of these have already been designated and three more will be competitively determined in 2011.
- Selection of host institutions for the CSCs was through a competitive process. Funding for start-up of the SWCSC has been made available FY 2011.
- The CSC network is designed to complement a continental network of Landscape Conservation Cooperatives (LCCs). Coordination of the processes to determine information needs and plan scientific programs is important to the success of each of these endeavors. CSCs will focus on delivering fundamental research findings to assist resource managers, while LCCs will focus on applying science to adaptive management.
- Priority science activities of CSCs will include:
  - Use and creation of high-resolution climate models and derivative products to help forecast ecological and population responses at national, regional, and local scales
  - Integration of physical climate models with ecological, habitat, and population response models
  - Development of methods to assess vulnerability of species, habitats, and human communities
  - Development of standardized approaches to modeling, monitoring, data management and decision support
- Boundaries of CSCs are intended to be flexible and porous. Environmental science needs related to climate do not stop at political borders, and research focused on natural resources also should not be held to fixed boundaries. The impressive scientific capability of the CSCs will be directed toward best meeting research needs, exclusive of geographic delineations.

### **Planned DOI Southwest Climate Science Center**

- The SWCSC is being hosted by a consortium of six institutions: University of Arizona, Tucson; University of California, Davis; University of California, Los Angeles; Desert Research Institute, Reno; University of Colorado, Boulder ; and the Scripps Institution of Oceanography at the University of California, San Diego. In addition to the six host institutions, the SWCSC also includes the following as partners: Arizona State University; Northern Arizona University; University of California, Merced; University of Nevada, Las Vegas; NASA Ames Research Center; and the U.S. Institute for Environmental Conflict Resolution.
- These institutions provide expertise in climate science, ecology, impacts assessment, modeling, human environments, and advanced information technology. This expertise will be needed to deal with climate issues in the Southwest, where changes in temperature and precipitation could

have significant effects on streams, forests, agricultural lands, and the Pacific Coast, in addition to the fish, wildlife, and human communities supported by these environments.

- Subject to Federal appropriations, the host institutions will receive five years of financial support to conduct climate research and provide infrastructure for the SWCSC.
- The University of Arizona will serve as the central location and administrative center for the SWCSC. USGS will locate scientific and administrative staff there and will distribute additional research staff at the affiliated host institutions. Other research organizations have been invited to station scientists at the SWCSC host institutions.
- USGS will hire a Center Director to lead the SWCSC. Dr. Dave Busch of the USGS, Pacific Southwest Area (dave\_busch@usgs.gov) is coordinating pre-implementation planning for the SWCSC.
- In addition to funding for the host institutions and support for USGS employees, DOI expects to have financing available to conduct a research program aligned with the scientific activities noted above. This funding is expected to be around \$2.5 million per year, subject to Congressional budget authorization.

### **Scientific and Stakeholder Processes**

- The research direction taken by the SWCSC will be guided by a science plan that will establish priorities and help ensure that the scientific program addresses priority management needs. In developing this plan, the CSC will receive advice and guidance from a Stakeholder Advisory Committee (SAC). A Science Implementation Panel (SIP) will assist with independent scientific review of projects comprising the SWCSC research program.
- The first SWCSC science plan is scheduled to be completed in late 2011. This science plan will be used to make determinations about research staffing and funding distribution for the SWCSC.
- The SWCSC will provide an opportunity for engagement of stakeholders throughout the Southwest in the science planning process. The first step in this process will be organizing the SAC, drawing from federal and state agencies, and tribal governments.
- This advisory committee will not include non-governmental organizations because of FACA. However, the interests of NGOs will be considered by creating key opportunities for input through partners and the LCCs.
- The SWCSC will address the scientific needs of multiple LCCs, including the Desert, California, Great Basin, Southern Rockies, and North Pacific. Representatives from LCCs will be viewed as key stakeholders and principal conduits for communication about management needs. Their presence on the SAC will help guide the research planning process and set priority science needs.
- It will be important for communication and collaboration to occur among the SWCSC, other research institutions, and associated LCCs to ensure that the highest priorities are being met, to eliminate redundancies, and to provide opportunities for sharing resources between programs.
- The Science Implementation Panel (SIP) will help develop strategies to accomplish the research priorities identified in the science plan. This panel will be made up of scientists with appropriate expertise from a broad range of organizations.